

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

<p>WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,</p> <p style="text-align: center;">Plaintiff,</p> <p>v.</p> <p>HP INC.</p> <p style="text-align: center;">Defendant.</p>	<p>Civil Case No. 2:24-cv-00752-JRG [Lead Case]</p> <p><b>JURY TRIAL DEMANDED</b></p>
<p>WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,</p> <p style="text-align: center;">Plaintiff,</p> <p>v.</p> <p>SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC.</p> <p style="text-align: center;">Defendants.</p>	<p>Civil Case No. 2:24-cv-00746-JRG [Member Case]</p>
<p>WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,</p> <p style="text-align: center;">Plaintiff,</p> <p>v.</p> <p>HP INC.</p> <p style="text-align: center;">Defendant.</p>	<p>Civil Case No. 2:24-cv-00764-JRG [Member Case]</p> <p><b>JURY TRIAL DEMANDED</b></p>

<p>WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,</p> <p>Plaintiff,</p> <p>v.</p> <p>SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC.</p> <p>Defendants.</p>	<p>Civil Case No. 2:24-cv-00765-JRG [Member Case]</p>
<p>WILUS INSTITUTE OF STANDARDS AND TECHNOLOGY INC.,</p> <p>Plaintiff,</p> <p>v.</p> <p>ASKEY COMPUTER CORP., ASKEY INTERNATIONAL CORP.</p> <p>Defendants.</p>	<p>Civil Case No. 2:24-cv-00766-JRG [Member Case]</p>

**SAMSUNG DEFENDANTS’ ANSWER, DEFENSES, AND COUNTERCLAIMS  
TO THE COMPLAINT IN CIVIL CASE NO. 2:24-CV-00746-JRG**

Defendants Samsung Electronics Co., Ltd. (“SEC”) and Samsung Electronics America, Inc. (“SEA”) (collectively, “Samsung”) file this Answer and Counterclaims in response to the Complaint (“Complaint”) filed by Plaintiff Wilus Institute of Standards and Technology Inc. (“Wilus”) in the above referenced action. Samsung denies the allegations and characterizations in Wilus’s Complaint unless expressly admitted in the following numbered Paragraphs, which correspond to the numbered Paragraphs in the Complaint.

### **BACKGROUND**

1. This complaint arises from Defendants' infringement of the following United States patents owned by Wilus, each of which relate to the "PHY" or "physical layer" of wireless communications technology: United States Patent Nos. 10,313,077 ("077 patent"), 10,687,281 ("281 patent"), 11,470,595 ("595 patent"), and 11,159,210 ("210 patent") (collectively, "Asserted Patents").

**ANSWER:** Samsung admits that Wilus purports to bring a patent infringement action for alleged infringement of United States Patent Nos. 10,313,077 ("077 Patent"), 10,687,281 ("281 Patent"), 11,470,595 ("595 Patent"), and 11,159,210 ("210 Patent") (collectively, "Asserted Patents"). Samsung denies that it infringes any valid claim of any of the Asserted Patents. Samsung denies any remaining allegations in Paragraph 1 of the Complaint.

### **NOTICE OF THE ASSERTED PATENTS**

2. The patented technologies which are the subject of this lawsuit are well known to Defendants.

**ANSWER:** Samsung denies the allegations in Paragraph 2 of the Complaint.

3. For example, on January 15, 2021 and December 27, 2022, Wilus submitted Letters of Assurance to the IEEE Standards Association Standards Board Patent Committee, stating that Wilus may own, control, or have the ability to license patent claims that might be or become essential patent claims for the IEEE 802.11ax and 802.11 standards. Samsung was a participant in the IEEE task group that developed the 802.11ax standard. On information and belief, Samsung was aware of the Letters of Assurance submitted by Wilus.

**ANSWER:** Samsung admits that Wilus purports to have submitted Letters of Assurance to the IEEE Standards Association Standards Board Patent Committee on January 15, 2021 and December 27, 2022. Samsung admits that, in these letters, Wilus stated that it may own, control, or have the ability to license patent claims that might be or become essential patent claims for the IEEE 802.11ax and 802.11 standards. Samsung admits that it was a participant in the IEEE task group that developed the 802.11ax standard. Samsung admits that it is aware of these Letters of Assurance. Samsung denies any remaining allegations in Paragraph 3 of the Complaint.

4. As for another example, on April 8, 2022, SEC was sent a letter by Sisvel International S.A. (“Sisvel”), acting in its role as a licensing manager of certain patents related to the IEEE Wi-Fi 6 (802.11ax) standard. This letter conveyed Wilus’s and Sisvel’s belief that Samsung products practiced Wilus patents and required a license to these Wilus patents. The letter contained a list of “patents essential to the 802.11ax standard,” which included the ’077, ’281, and ’210 patents. The patent application that resulted in the ’595 patent was still pending before the U.S. Patent Office at the time this letter was sent. The letter identified specific Samsung products as examples of products that implement essential features of the Wi-Fi 6 standard. It also contained a link to a brochure that included a table identifying specific sections and figures of the Wi-Fi 6 standard as illustrations of what the essential patents covered in the standard. The letter included an offer to grant a patent license for Wilus patents including the ’077, ’281, and ’210 patents to SEC in exchange for royalty payments.

**ANSWER:** Samsung admits that it was sent a letter dated April 8, 2022 by Sisvel International, S.A. Samsung admits that in the letter, Sisvel held itself out as a licensing manager of patents co-owned by Wilus and SK Telecom. Samsung admits that the letter stated that Sisvel believed that Samsung required a license. Samsung admits that the letter identified Samsung

products alleged to implement “essential features” of the Wi-Fi 6 standard. Samsung admits that the letter contained a link to a brochure titled “Wi-Fi 6 Patent Brochure.” Samsung admits that the brochure included a table of patent numbers and references to sections and figures of the Wi-Fi 6 standard. Samsung admits that the letter included an offer to grant a patent license for certain Wilus patents in exchange for royalty payments. Samsung admits that the ’077, ’281, and ’210 Patents were listed in an attachment to the letter, along with other patents. Samsung denies any remaining allegations in Paragraph 4 of the Complaint.

5. As another example, on January 18, 2023, SEC was sent another letter by Sisvel that included a “list of Pool Wi-Fi 6 SEPs evaluated by independent third-party patent evaluators as being essential to the Wi-Fi 6 Standard.” This list included the ’077, ’281, ’595, and ’210 patents.

**ANSWER:** Samsung admits that it was sent a letter dated January 18, 2023 that purported to include such a list. Samsung admits that the list included the ’077, ’281, ’595, and ’210 Patents. Samsung denies the remaining allegations in Paragraph 5 of the Complaint.

#### **PLAINTIFF WILUS AND THE ASSERTED PATENTS**

6. Plaintiff Wilus is a research and development company specializing in the development of new technologies related to wireless communications and multimedia, including Wi-Fi and other wireless protocols. Founded in 2012, Wilus has been at the forefront of research and development in wireless communications for more than a decade. The company is employee-owned, and its team currently consists of 20 engineers and inventors.

**ANSWER:** Samsung is without knowledge or information sufficient to form a belief about the truth of the allegations in Paragraph 6 of the Complaint and therefore denies them.

7. Since its formation Wilus has made over 700 technical contributions to leading standards bodies that define international standards for technologies including cellular wireless,

wireless LAN, and multimedia compression. In particular, Wilus has played a crucial role in the development and standardization of Wi-Fi 6 technologies, contributing significantly to the enhanced speed, efficiency, capabilities, and performance of Wi-Fi 6 networks. Its work is significant in the context of the standards pertaining to Wi-Fi 6, both in terms of the number of technical contributions and in terms of the importance of those technical contributions to the standards.

**ANSWER:** Samsung is without knowledge or information sufficient to form a belief about the truth of the allegations in Paragraph 7 of the Complaint and therefore denies them.

8. Wilus is a corporation organized under the laws of South Korea, with its principal place of business at 5F 216 Hwangsaoul-ro, Bundang-gu, Seongnam-si, Gyeonggi do, 13595 Republic of Korea.

**ANSWER:** Samsung is without knowledge or information sufficient to form a belief about the truth of the allegations in Paragraph 8 of the Complaint and therefore denies them.

9. Wilus is the owner of all right, title, and interest in U.S. Patent No. 10,313,077, titled “Wireless communication method and wireless communication for coexistence with legacy wireless communication terminal,” and issued June 4, 2019. A copy of the ’077 Patent is attached as Exhibit 1.

**ANSWER:** Samsung admits that Wilus purports to be the owner of U.S. Patent No. 10,313,077. Samsung admits that a purported copy of the ’077 Patent is attached to the Complaint as Exhibit 1. Samsung admits that Exhibit 1 bears the title “Wireless communication method and wireless communication terminal for coexistence with legacy wireless communication terminal” and a “Date of Patent” of June 4, 2019. Samsung denies any remaining allegations in Paragraph 9 of the Complaint.

10. Wilus is the owner of all right, title, and interest in U.S. Patent No. 10,687,281, titled “Wireless communication method and wireless communication terminal, which use discontinuous channel,” and issued June 16, 2020. A copy of the ’281 patent is attached as Exhibit 2.

**ANSWER:** Samsung admits that Wilus purports to be the owner of U.S. Patent No. 10,687,281. Samsung admits that a purported copy of the ’281 Patent is attached to the Complaint as Exhibit 2. Samsung admits that Exhibit 2 bears the title “Wireless communication method and wireless communication terminal, which use discontinuous channel” and a “Date of Patent” of June 16, 2020. Samsung denies any remaining allegations in Paragraph 10 of the Complaint.

11. Wilus is the owner of all right, title, and interest in U.S. Patent No. 11,470,595, titled “Wireless communication method and wireless communication terminal, which use discontinuous channel,” and issued October 11, 2022. A copy of the ’595 patent is attached as Exhibit 3.

**ANSWER:** Samsung admits that Wilus purports to be the owner of U.S. Patent No. 11,470,595. Samsung admits that a purported copy of the ’595 Patent is attached to the Complaint as Exhibit 3. Samsung admits that Exhibit 3 bears the title “Wireless communication method and wireless communication terminal, which use discontinuous channel” and a “Date of Patent” of October 11, 2022. Samsung denies any remaining allegations in Paragraph 11 of the Complaint.

12. Wilus is the owner of all right, title, and interest U.S. Patent No. 11,159,210, titled “Wireless communication method and wireless communication terminal for signaling multi- user packet, and issued October 26, 2021. A copy of the ’210 patent is attached as Exhibit 4.

**ANSWER:** Samsung admits that Wilus purports to be the owner of U.S. Patent No. 11,159,210. Samsung admits that a purported copy of the ’210 Patent is attached to the Complaint

as Exhibit 4. Samsung admits that Exhibit 4 bears the title “Wireless communication method and wireless communication terminal for signaling multi-user packet” and a “Date of Patent” of October 26, 2021. Samsung denies any remaining allegations in Paragraph 12 of the Complaint.

**DEFENDANT AND THE ACCUSED PRODUCTS**

13. On information and belief, Defendant Samsung Electronics Co., Ltd. is a corporation organized under the laws of South Korea, with its principal place of business at 129, Samsung-Ro, YeongTong-Gu, Suwon-Si, Gyonggi-Do, 443-742, South Korea.

**ANSWER:** Samsung admits that SEC is a corporation organized under the laws of the Republic of Korea with its principal place of business at 129 Samsung-Ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea. To the extent Paragraph 13 of the Complaint recites a legal conclusion, no response is required.

14. On information and belief, Defendant Samsung Electronics America, Inc. is a United States corporation organized under the laws of the State of New York, with its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660.

**ANSWER:** Samsung admits that SEA is a United States corporation organized under the laws of the State of New York, with its principal place of business is at 85 Challenger Road, Ridgefield Park, New Jersey 07660. To the extent Paragraph 14 of the Complaint recites a legal conclusion, no response is required.

15. SEA is a wholly-owned subsidiary of SEC.

**ANSWER:** Samsung admits that SEA is a wholly owned subsidiary of SEC.

16. SEA distributes certain Samsung consumer electronics products, including the Accused Products, in the United States.



**ANSWER:** Samsung admits that SEA distributes certain Samsung consumer electronics products in the United States. Samsung admits that Wilus, through its Complaint, accuses various Samsung products of allegedly infringing the Asserted Patents. Samsung denies any alleged infringement. Samsung denies the remaining allegations in Paragraph 16 of the Complaint.

17. On information and belief, SEA has corporate offices in the Eastern District of Texas at 1303 East Lookout Drive, Richardson, Texas 75082, 2800 Technology Drive, Suite 200, Plano, Texas 75074, and at 6625 Excellence Way, Plano, Texas 75023.

**ANSWER:** Samsung admits that SEA maintains an office located in the Eastern District of Texas at 6625 Excellence Way Plano, TX 75023. Samsung denies that SEA has a corporate office at 1303 East Lookout Drive, Richardson, Texas 75082 or at 2800 Technology Drive, Suite 200, Plano, Texas 75074.

18. SEA may be served with process through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

**ANSWER:** Admitted.

19. The Accused Products are all of Samsung's Wi-Fi 6 (802.11ax) enabled devices, including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables, used, offered for sale, sold, and/or imported by Defendants in the United States.

**ANSWER:** Samsung admits that Wilus, through its Complaint, accuses all of Samsung's Wi-Fi 6 (802.11ax) enabled devices, including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables, used, offered for sale, sold, and/or imported by Samsung in the United States of infringing the Asserted Patents. Samsung denies any alleged infringement. Samsung denies the remaining allegations in Paragraph 19 of the Complaint.

**JURISDICTION AND VENUE**

20. This action arises under the patent laws of the United States, Title 35 of the United States Code.

**ANSWER:** Samsung admits that the Complaint purports to be an action that arises under the Patent Laws of the United States, 35 U.S.C. §§ 1, *et seq.* Samsung does not contest, for purposes of this case only, that this Court has federal jurisdiction over the case. Samsung denies any allegations of infringement.

21. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

**ANSWER:** Paragraph 21 sets forth conclusions of law to which no response is required. To the extent a response is deemed required, Samsung admits that, for purposes of this case only, that this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a), provided that standing and other requirements are met. Samsung denies that Wilus is entitled to any relief for its allegations of patent infringement, whether by award of damages, injunction, or otherwise. Samsung further denies any allegations of infringement.

22. This Court has personal jurisdiction over Samsung in this action because Samsung has committed acts of infringement within this District giving rise to this action, has a regular and established place of business in this District, and has established minimum contacts with this forum such that the exercise of jurisdiction over Samsung would not offend traditional notions of fair play and substantial justice. Samsung, directly and/or through subsidiaries or intermediaries, conducts its business extensively throughout Texas, by shipping, distributing, offering for sale, selling, and advertising its products and/or services in Texas and the Eastern District of Texas, regularly does business or solicit business, engage in other persistent courses of conduct, and/or

derives substantial revenue from products and/or services provided to individuals in Texas, and commits acts of infringement of Wilus's patents in this District by, among other things, making, using, importing, offering to sell, and selling products that infringe the asserted patents, including without limitation the Samsung Wi-Fi 6 enabled devices accused of infringement in this case.

**ANSWER:** Samsung does not contest, solely for the purpose of the present litigation, whether personal jurisdiction properly lies in this District. Samsung admits that SEA engages in offering and selling products to customers in the State of Texas. However, Samsung denies that it has committed acts of infringement in the Eastern District of Texas or elsewhere, or that it has committed any act, directly or indirectly, that would give rise to any cause of action under the Complaint. To the extent Paragraph 22 of the Complaint states a legal conclusion, no response is required. Samsung denies any remaining allegations in Paragraph 22 of the Complaint.

23. Samsung, directly and/or through subsidiaries or intermediaries, has purposefully and voluntarily placed one or more products and/or services in the stream of commerce that practice the Asserted Patents with the intention and expectation that they will be purchased and used by consumers in the Eastern District of Texas. These products and/or services have been and continue to be purchased and used in the Eastern District of Texas.

**ANSWER:** Samsung admits that Samsung devices are sold in the State of Texas, including in the Eastern District of Texas. Samsung denies any remaining allegations in Paragraph 23 of the Complaint.

24. Venue as to Samsung is proper in this District under 28 U.S.C. §§ 1391 and 1400(b). Samsung has transacted business in this District and has committed acts of direct and indirect infringement in this District by, among other things, making, using, importing, offering to sell, and selling products that infringe the Asserted Patents.

**ANSWER:** Samsung admits SEA has transacted business in this District. To the extent Paragraph 24 of the Complaint recites a legal conclusion, no response is required. Samsung denies any remaining allegations in Paragraph 24 of the Complaint.

25. Defendant SEA maintains a regular and established place of business at 1301 East Lookout Drive, Richardson, Texas 75082, 2800 Technology Drive, Suite 200, Plano, Texas 75074, and 6625 Excellence Way, Plano, Texas 75023.

**ANSWER:** Samsung admits that SEA maintains an office located in the Eastern District of Texas at 6625 Excellence Way Plano, TX 75023. Samsung denies that SEA has a corporate office at 1303 East Lookout Drive, Richardson, Texas 75082 or at 2800 Technology Drive, Suite 200, Plano, Texas 75074. To the extent Paragraph 25 of the Complaint states a legal conclusion, no response is required. Samsung denies any remaining allegations in Paragraph 25 of the Complaint.

26. Defendant SEC is a foreign corporation. Venue is proper as to a foreign defendant in any district. 28 U.S.C. §§ 1391(c)(3).

**ANSWER:** Samsung admits that SEC is a foreign corporation not resident in the United States. To the extent Paragraph 26 of the Complaint recites a legal conclusion, no response is required. Samsung denies any remaining allegations in Paragraph 26 of the Complaint.

27. Further, Samsung has admitted or not contested proper venue in this Judicial District in other patent infringement actions.

**ANSWER:** Samsung admits that it has not contested proper venue in this Judicial District in other patent infringement actions. To the extent Paragraph 27 of the Complaint recites a legal conclusion, no response is required. Samsung denies any remaining allegations in Paragraph 27 of the Complaint.

**COUNT 1 – CLAIM FOR INFRINGEMENT OF THE '077 PATENT**

28. Wilus incorporates by reference each of the allegations in the foregoing paragraphs as if fully set forth herein and further alleges as follows:

**ANSWER:** Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

29. On June 4, 2019, the United States Patent and Trademark Office issued U.S. Patent No. 10,313,077, titled “Wireless communication method and wireless communication terminal for coexistence with legacy wireless communication terminal.” Exhibit 1.

**ANSWER:** Samsung admits that Exhibit 1 bears the title “Wireless communication method and wireless communication terminal for coexistence with legacy wireless communication terminal” and a “Date of Patent” of June 4, 2019. Samsung denies any remaining allegations in Paragraph 29 of the Complaint.

30. The '077 patent claims devices and methods used to implement the PHY layer of Wi-Fi 6 wireless LANs.

**ANSWER:** To the extent Paragraph 30 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 30 of the Complaint.

31. Wilus is the owner of the '077 patent with full rights to pursue recovery of royalties for damages for infringement, including full rights to recover past and future damages.

**ANSWER:** Samsung admits that Wilus purports to be the owner of the '077 Patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 31 of the Complaint and, on that basis, denies such allegations.

32. The claims of the '077 patent were issued by the United States Patent and Trademark Office and are presumed by statute to be valid. They are not directed to abstract ideas

and moreover contain inventive concepts sufficient to ensure that the patent amounts to significantly more than a patent on a patent ineligible concept itself. The written description of the '077 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the nonconventional and non-generic combination of claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** To the extent Paragraph 32 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 32 of the Complaint.

33. Wilus and its predecessors in interest have satisfied the requirements of 35 U.S.C. § 287(a) with respect to the '077 patent, and Wilus is entitled to damages for Defendant's past infringement. For example, Sisvel's letters conveying Wilus's and Sisvel's belief that Samsung products practiced Wilus's '077 patent and offering to license Wilus's patents to Samsung provided Samsung with actual notice of infringement.

**ANSWER:** To the extent Paragraph 33 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 33 of the Complaint.

34. Defendants have directly infringed (literally and equivalently) and induced and contributed to infringement by others of the '077 patent by, without a license or permission from Wilus: making, using, selling, offering for sale, or importing products that infringe the claims of the '077 patent; and inducing and contributing to infringement by others of the claims of the '077 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 34 of the Complaint.

35. On information and belief, Defendant uses, imports, offers for sale, and sells certain infringing products in the United States. The Accused Products are, for example, Wi-Fi 6

(802.11ax) enabled devices, including laptops and desktops, used, offered for sale, sold, and/or imported by Defendant in the United States.

**ANSWER:** Samsung admits that it sells certain products that are compatible with Wi-Fi 6 (802.11ax) including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables. Samsung denies any remaining allegations in Paragraph 35 of the Complaint.

36. The Accused Products satisfy all claim limitations of one or more claims of the '077 Patent. On information and belief, the Accused Products employ, implement, or utilize materially the same Wi-Fi 6 technology, such that facts material to infringement by one Accused Product will be material to all Accused Products. For example, the Accused Products include “A wireless communication terminal that communicates wirelessly, the terminal”:

**ANSWER:** To the extent Paragraph 36 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 36 of the Complaint.

37. The Accused Products include “a transceiver” and “a processor”:

**ANSWER:** To the extent Paragraph 37 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 37 of the Complaint.

38. In the Accused Products, the processor is configured to “receive a non-legacy physical layer frame by using the transceiver”:

**ANSWER:** To the extent Paragraph 38 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 38 of the Complaint.

39. In the Accused Products, the processor is configured to “obtain a legacy signaling field including information decodable by a legacy wireless communication terminal from the non-legacy physical layer frame”:

**ANSWER:** To the extent Paragraph 39 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 39 of the Complaint.

40. In the Accused Products, the processor is configured to “obtain length information indicating information on a duration of the non-legacy physical layer frame, from the legacy signaling field”:

**ANSWER:** To the extent Paragraph 40 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 40 of the Complaint.

41. In the Accused Products, the processor is configured to “obtain information other than information on the duration of the non-legacy physical layer frame through a remaining value obtained by dividing the length information by a data size transmittable by a symbol of a legacy physical layer frame, wherein the data size transmittable by a symbol of the legacy physical layer frame is 3 octets when a data rate of the legacy physical layer frame is 6 Mbps”:

**ANSWER:** To the extent Paragraph 41 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 41 of the Complaint.

42. In the Accused Products, the processor is configured to “determine the number of symbols of data of the non-legacy physical layer frame according to a following equation,

$$N_{\text{SYM}} = \left\lfloor \left( \frac{L_{\text{LENGTH}} + m + 3}{3} \times 4 - T_{\text{HE\_PREAMBLE}} \right) / T_{\text{SYM}} \right\rfloor - b_{\text{PE\_Disambiguity}}$$

where  $\lfloor x \rfloor$  denotes a largest integer less than or equal to x,  $L_{\text{LENGTH}}$  denotes the length information, m denotes a value obtained by subtracting the remaining value from the data size transmittable by a symbol of the legacy physical layer frame,  $b_{\text{PE\_Disambiguity}}$  denotes a value of PE Disambiguity field,  $T_{\text{HE\_PREAMBLE}}$  denotes a duration of non-legacy preamble of the non-legacy physical layer frame,  $T_{\text{SYM}}$  denotes a duration of a symbol of the data of the non-legacy physical layer frame”:



**ANSWER:** To the extent Paragraph 42 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 42 of the Complaint.

43. In the Accused Products, “the PE Disambiguity field is set based on the duration of a symbol of the data of the non-legacy physical layer frame and an increment of duration to set a value of the length information based on a duration of a symbol of the legacy physical layer frame.”

**ANSWER:** To the extent Paragraph 43 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 43 of the Complaint.

44. Defendants have also knowingly and intentionally induced and contributed to infringement of the '077 patent in violation of 35 U.S.C. §§ 271(b) and 271(c). For example, Defendants have had knowledge or were willfully blind of the '077 patent and the infringing nature of the Accused Products at least because SEC had received the April 8, 2022, letter from Sisvel identifying the '077 patent as “essential to the 802.11ax standard” and identifying examples of Samsung products that implement essential features of the standard.

**ANSWER:** Samsung denies the allegations in Paragraph 44 of the Complaint.

45. Despite this knowledge of the '077 patent, Defendants have continued to actively encourage and instruct its customers to use and integrate the Accused Products in ways that directly infringe the '077 patent. Defendants have done so knowing and intending that their customers would commit these infringing acts. Defendants have also continued to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '077 patent, thereby specifically intending for and inducing their customers to infringe the '077 patent through the customers' normal and customary use of the Accused Products.

**ANSWER:** Samsung denies the allegations in Paragraph 45 of the Complaint.

46. On information and belief, the Accused Products contain components that constitute a material part of '077 patent invention and that are not a staple article or commodity suitable for substantial noninfringing use. On information and belief, Defendants have sold, offered for sale, and imported into the United States such components knowing they are especially made or especially adapted for use in infringement of the '077 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 46 of the Complaint.

47. On information and belief, Defendants' infringement has and continues to be willful. Defendants, without a good faith belief of invalidity or non-infringement, have known or have been willfully blind to the fact that making, using, offering to sell, or selling the Accused Products to their customers, infringes the '077 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 47 of the Complaint.

48. Defendants have induced, and continue to induce, infringement of the '077 patent by actively encouraging others (including its customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education, and instructions to its customers; providing the Accused Products to customers; and indemnifying patent infringement within the United States.

**ANSWER:** Samsung denies the allegations in Paragraph 48 of the Complaint.

49. Samsung and its customers benefit from the use of the inventions claimed in the '077 patent. On information and belief, these benefits include faster throughput, higher capacity, broader coverage, and improved coexistence when using Wi-Fi 6 communications.

**ANSWER:** Samsung denies the allegations in Paragraph 49 of the Complaint.

50. Wilus has been damaged by Defendants' willful infringement of the '077 patent and is entitled to damages as provided for in 35 U.S.C. § 284, including reasonable royalty damages.

**ANSWER:** Samsung denies the allegations in Paragraph 50 of the Complaint.

**COUNT 2 – CLAIM FOR INFRINGEMENT OF THE '281 PATENT**

51. Wilus incorporates by reference each of the allegations in the foregoing paragraphs as if fully set forth herein and further alleges as follows:

**ANSWER:** Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

52. On June 16, 2020, the United States Patent and Trademark Office issued U.S. Patent No. 10,687,281, titled "Wireless communication method and wireless communication terminal, which use discontinuous channel." Exhibit 2.

**ANSWER:** Samsung admits that Exhibit 2 bears the title "Wireless communication method and wireless communication terminal, which use discontinuous channel" and a "Date of Patent" of June 16, 2020. Samsung denies any remaining allegations in Paragraph 52 of the complaint.

53. The '281 patent claims devices and methods used to implement the PHY layer of Wi-Fi 6 wireless LANs.

**ANSWER:** To the extent Paragraph 53 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 53 of the complaint.

54. Wilus is the owner of the '281 patent with full rights to pursue recovery of royalties for damages for infringement, including full rights to recover past and future damages.

**ANSWER:** Samsung admits that Wilus purports to be the owner of the '281 Patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 54 of the Complaint and, on that basis, denies such allegations.

55. The claims of the '281 patent were issued by the United States Patent and Trademark Office and are presumed by statute to be valid. They are not directed to abstract ideas and moreover contain inventive concepts sufficient to ensure that the patent amounts to significantly more than a patent on a patent ineligible concept itself. The written description of the '281 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the nonconventional and non-generic combination of claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** To the extent Paragraph 55 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 55 of the complaint.

56. Wilus and its predecessors in interest have satisfied the requirements of 35 U.S.C. § 287(a) with respect to the '281 patent, and Wilus is entitled to damages for Defendants' past infringement. For example, Sisvel's letters conveying Wilus's and Sisvel's belief that Samsung products practiced Wilus's '281 patent and offering to license Wilus's patents to Samsung provided Samsung with actual notice of infringement.

**ANSWER:** To the extent Paragraph 56 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 56 of the complaint.

57. Defendant has directly infringed (literally and equivalently) and induced and contributed to infringement by others of the '281 patent by, without a license or permission from Wilus: making, using, selling, offering for sale, or importing products that infringe the claims of

the '281 patent; and inducing and contributing to infringement by others of the claims of the '281 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 57 of the Complaint.

58. On information and belief, Defendants use, import, offer for sale, and sell certain infringing products in the United States. The Accused Products are, for example, Wi-Fi 6 (802.11ax) enabled devices, including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables, used, offered for sale, sold, and/or imported by Defendants in the United States.

**ANSWER:** Samsung admits that it sells certain products that are compatible with Wi-Fi 6 (802.11ax) including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables. Samsung denies any remaining allegations in Paragraph 58 of the Complaint.

59. The Accused Products satisfy all claim limitations of one or more claims of the '281 Patent. On information and belief, the Accused Products employ, implement, or utilize materially the same Wi-Fi 6 technology, such that facts material to infringement by one Accused Product will be material to all Accused Products. For example, the Accused Products include “A wireless communication terminal, the terminal”:

**ANSWER:** To the extent Paragraph 59 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 59 of the complaint.

60. The Accused Products include “a processor” and “a communication unit,” and the processor is configured to “receive a wireless packet through the communication unit”:

**ANSWER:** To the extent Paragraph 60 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 60 of the Complaint.

61. In the Accused Products, the processor is configured to “obtain bandwidth information indicated via a bandwidth field of HE-SIG-A of the received packet”:

**ANSWER:** To the extent Paragraph 61 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 61 of the Complaint.

62. In the Accused Products, the processor is configured to “obtain information of an unassigned resource unit via at least one of the bandwidth field of the HE-SIG-A and a subfield of HE-SIG-B of the received packet”:

**ANSWER:** To the extent Paragraph 62 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 62 of the Complaint.

63. In the Accused Products, “the processor is configured to “decode the received packet based on the bandwidth information and the information of the unassigned resource unit”:

**ANSWER:** To the extent Paragraph 63 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 63 of the Complaint.

64. In the Accused Products, “the information of the unassigned resource unit is indicated via a combination of the bandwidth field of the HE-SIG-A and a resource unit allocation field of the HE-SIG-B”:

**ANSWER:** To the extent Paragraph 64 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 64 of the Complaint.

65. In the Accused Products, “the bandwidth field of the HE-SIG-A indicates channel information to be punctured within the bandwidth, and the resource unit allocation field indicates additional puncturing information for the unassigned resource unit within the bandwidth”:

**ANSWER:** To the extent Paragraph 65 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 65 of the Complaint.

66. Defendants have also knowingly and intentionally induced and contributed to infringement of the '281 patent in violation of 35 U.S.C. §§ 271(b) and 271(c). For example, Defendants have had knowledge or were willfully blind of the '281 patent and the infringing nature of the Accused Products at least because SEC had received the April 8, 2022, letter from Sisvel identifying the '281 patent as “essential to the 802.11ax standard” and identifying examples of Samsung products that implement essential features of the standard.

**ANSWER:** Samsung denies the allegations in Paragraph 66 of the Complaint.

67. Despite this knowledge of the '281 patent, Defendants have continued to actively encourage and instruct its customers to use and integrate the Accused Products in ways that directly infringe the '281 patent. Defendants have done so knowing and intending that their customers would commit these infringing acts. Defendants have also continued to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '281 patent, thereby specifically intending for and inducing their customers to infringe the '281 patent through the customers' normal and customary use of the Accused Products.

**ANSWER:** Samsung denies the allegations in Paragraph 67 of the Complaint.

68. On information and belief, the Accused Products contain components that constitute a material part of the '281 patent invention and that are not a staple article or commodity suitable for substantial noninfringing use. On information and belief, Defendants have sold, offered for sale, and imported into the United States such components knowing they are especially made or especially adapted for use in infringement of the '281 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 68 of the Complaint.

69. On information and belief, Defendants' infringement has and continues to be willful. Defendants, without a good faith belief of invalidity or non-infringement, have known or

have been willfully blind to the fact that making, using, offering to sell, or selling the Accused Products to their customers, infringes the '281 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 69 of the Complaint.

70. Defendants have induced, and continue to induce, infringement of the '281 patent by actively encouraging others (including its customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education, and instructions to its customers; providing the Accused Products to customers; and indemnifying patent infringement within the United States.

**ANSWER:** Samsung denies the allegations in Paragraph 70 of the Complaint.

71. Samsung and its customers benefit from the use of the inventions claimed in the '281 patent. On information and belief, these benefits include faster throughput, higher capacity, broader coverage, and improved coexistence when using Wi-Fi 6 communications.

**ANSWER:** Samsung denies the allegations in Paragraph 71 of the Complaint.

72. Wilus has been damaged by Defendants' willful infringement of the '281 patent and is entitled to damages as provided for in 35 U.S.C. § 284, including reasonable royalty damages.

**ANSWER:** Samsung denies the allegations in Paragraph 72 of the Complaint.

**COUNT 3 – CLAIM FOR INFRINGEMENT OF THE '595 PATENT**

73. Wilus incorporates by reference each of the allegations in the foregoing paragraphs as if fully set forth herein and further alleges as follows:

**ANSWER:** Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.



74. On October 11, 2022, the United States Patent and Trademark Office issued U.S. Patent No. 11,470,595, titled “Wireless communication method and wireless communication terminal, which use discontinuous channel.” Exhibit 3.

**ANSWER:** Samsung admits that Exhibit 3 bears the title “Wireless communication method and wireless communication terminal, which use discontinuous channel” and a “Date of Patent” of October 11, 2022. Samsung denies any remaining allegations in Paragraph 74 of the Complaint.

75. The ’595 patent claims devices and methods used to implement the PHY layer of Wi-Fi 6 wireless LANs.

**ANSWER:** To the extent Paragraph 75 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 75 of the Complaint.

76. Wilus is the owner of the ’595 patent with full rights to pursue recovery of royalties for damages for infringement, including full rights to recover past and future damages.

**ANSWER:** Samsung admits that Wilus purports to be the owner of the ’595 Patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 76 of the Complaint and, on that basis, denies such allegations.

77. The claims of the ’595 patent were issued by the United States Patent and Trademark Office and are presumed by statute to be valid. They are not directed to abstract ideas and moreover contain inventive concepts sufficient to ensure that the patent amounts to significantly more than a patent on a patent ineligible concept itself. The written description of the ’595 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the nonconventional and non-generic combination of

claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** To the extent Paragraph 77 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 77 of the Complaint.

78. Wilus and its predecessors in interest have satisfied the requirements of 35 U.S.C. § 287(a) with respect to the '595 patent, and Wilus is entitled to damages for Defendant's past infringement. For example, Sisvel's letters conveying Wilus's and Sisvel's belief that Samsung products practiced Wilus's '595 patent and offering to license Wilus's patents to Samsung provided Samsung with actual notice of infringement.

**ANSWER:** To the extent Paragraph 78 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 78 of the Complaint.

79. Defendants have directly infringed (literally and equivalently) and induced and contributed to infringement by others of the '595 patent by, without a license or permission from Wilus: making, using, selling, offering for sale, or importing products that infringe the claims of the '595 patent; and inducing and contributing to infringement by others of the claims of the '595 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 79 of the Complaint.

80. On information and belief, Defendants use, import, offer for sale, and sell certain infringing products in the United States. The Accused Products are, for example, Wi-Fi 6 (802.11ax) enabled devices, including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables, used, offered for sale, sold, and/or imported by Defendants in the United States.

**ANSWER:** Samsung admits that it sells certain products that are compatible with Wi-Fi 6 (802.11ax) including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables. Samsung denies any remaining allegations in Paragraph 80 of the Complaint.

81. The Accused Products satisfy all claim limitations of one or more claims of the '595 Patent. On information and belief, the Accused Products employ, implement, or utilize materially the same Wi-Fi 6 technology, such that facts material to infringement by one Accused Product will be material to all Accused Products. For example, the Accused Products include "A wireless communication terminal, the terminal":

**ANSWER:** To the extent Paragraph 81 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 81 of the Complaint.

82. The Accused Products include "a transceiver" and "a processor":

**ANSWER:** To the extent Paragraph 82 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 82 of the Complaint.

83. In the Accused Products, the processor is configured to "receive a wireless packet including an High Efficiency Signal A (HE-SIG-A) field and an High Efficiency Signal B (HE-SIG-B) field."

**ANSWER:** To the extent Paragraph 83 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 83 of the Complaint.

84. In the Accused Products, the processor is configured to "obtain bandwidth information indicated via a bandwidth field included in the HE-SIG-A field."

**ANSWER:** To the extent Paragraph 84 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 84 of the Complaint.

85. In the Accused Products, the processor is configured to “obtain information of an unassigned resource unit via at least one subfield included in the HE-SIG-B field.”

**ANSWER:** To the extent Paragraph 85 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 85 of the Complaint.

86. In the Accused Products, “the bandwidth field is related to bandwidth over which the received wireless packet is transmitted, and is used to obtain the information of the unassigned resource unit”:

**ANSWER:** To the extent Paragraph 86 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 86 of the Complaint.

87. In the Accused Products, the bandwidth field is used to “decode a data of the received wireless packet based on the bandwidth information and the information of the unassigned resource unit.”:

**ANSWER:** To the extent Paragraph 87 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 87 of the Complaint.

88. In the Accused Products, the unassigned resource unit is explicitly indicated with the information of the unassigned resource unit based on the bandwidth field and the at least one subfield” and “the information of the unassigned resource unit includes information of a C26 field indicating whether a user is allocated to a center 26-tone resource unit of 80 MHz upon the bandwidth related to a transmission of the received wireless packet indicated by the bandwidth field being 80 MH or more, not 20 MHz or 40 MHz”:

**ANSWER:** To the extent Paragraph 88 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 88 of the Complaint.

89. Defendant has also knowingly and intentionally induced and contributed to infringement of the '595 patent in violation of 35 U.S.C. §§ 271(b) and 271(c). For example, Defendant has had knowledge or were willfully blind of the '595 patent and the infringing nature of Accused Products at least because SEC had received the January 18, 2023, letter from Sisvel identifying the '595 patent as “essential to the 802.11ax standard” and because Samsung was aware that it sold products that implement essential features of the standard.

**ANSWER:** Samsung denies the allegations in Paragraph 89 of the Complaint.

90. Despite this knowledge of the '595 patent, Defendants have continued to actively encourage and instruct its customers to use and integrate the Accused Products in ways that directly infringe the '595 patent. Defendants have done so knowing and intending that their customers would commit these infringing acts. Defendants have also continued to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '595 patent, thereby specifically intending for and inducing their customers to infringe the '595 patent through the customers' normal and customary use of the Accused Products.

**ANSWER:** Samsung denies the allegations in Paragraph 90 of the Complaint.

91. On information and belief, the Accused Products contain components that constitute a material part of the '595 patent invention and that are not a staple article or commodity suitable for substantial noninfringing use. On information and belief, Defendants have sold, offered for sale, and imported into the United States such components knowing they are especially made or especially adapted for use in infringement of the '595 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 91 of the Complaint.

92. On information and belief, Defendants' infringement has and continues to be willful. Defendants, without a good faith belief of invalidity or non-infringement, have known or

have been willfully blind to the fact that making, using, offering to sell, or selling the Accused Products to their customers, infringes the '595 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 92 of the Complaint.

93. Defendants have induced, and continue to induce, infringement of the '595 patent by actively encouraging others (including its customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education, and instructions to its customers; providing the Accused Products to customers; and indemnifying patent infringement within the United States.

**ANSWER:** Samsung denies the allegations in Paragraph 93 of the Complaint.

94. Samsung and its customers benefit from the use of the inventions claimed in the '595 patent. On information and belief, these benefits include faster throughput, higher capacity, broader coverage, and improved coexistence when using Wi-Fi 6 communications.

**ANSWER:** Samsung denies the allegations in Paragraph 94 of the Complaint.

95. Wilus has been damaged by Defendant's willful infringement of the '595 patent and is entitled to damages as provided for in 35 U.S.C. § 284, including reasonable royalty damages.

**ANSWER:** Samsung denies the allegations in Paragraph 95 of the Complaint.

**COUNT 4 – CLAIM FOR INFRINGEMENT OF THE '210 PATENT**

96. Wilus incorporates by reference each of the allegations in the foregoing paragraphs as if fully set forth herein and further alleges as follows:

**ANSWER:** Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

97. On October 26, 2021, the United States Patent and Trademark Office issued U.S. Patent No. 11,159,210, titled “Wireless communication method and wireless communication terminal for signaling multi-user packet.” Exhibit 4.

**ANSWER:** Samsung admits that Exhibit 4 bears the title “Wireless communication method and wireless communication terminal for signaling multi-user packet” and a “Date of Patent” of October 26, 2021. Samsung denies any remaining allegations in Paragraph 97 of the Complaint.

98. The ’210 patent claims devices and methods used to implement the PHY layer of Wi-Fi 6 wireless LANs.

**ANSWER:** To the extent Paragraph 98 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 98 of the Complaint.

99. Wilus is the owner of the ’210 patent with full rights to pursue recovery of royalties for damages for infringement, including full rights to recover past and future damages.

**ANSWER:** Samsung admits that Wilus purports to be the owner of the ’210 Patent. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations in Paragraph 99 of the Complaint and, on that basis, denies such allegations.

100. The claims of the ’210 patent were issued by the United States Patent and Trademark Office and are presumed by statute to be valid. They are not directed to abstract ideas and moreover contain inventive concepts sufficient to ensure that the patent amounts to significantly more than a patent on a patent ineligible concept itself. The written description of the ’210 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the nonconventional and non-generic combination of

claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

**ANSWER:** To the extent Paragraph 100 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 100 of the Complaint.

101. Wilus and its predecessors in interest have satisfied the requirements of 35 U.S.C. § 287(a) with respect to the '210 patent, and Wilus is entitled to damages for Defendants' past infringement. For example, Sisvel's letters conveying Wilus's and Sisvel's belief that Samsung products practiced Wilus's '210 patent and offering to license Wilus's patents to Samsung provided Samsung with actual notice of infringement.

**ANSWER:** To the extent Paragraph 101 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 101 of the Complaint.

102. Defendants have directly infringed (literally and equivalently) and induced and contributed to infringement by others of the '210 patent by, without a license or permission from Wilus: making, using, selling, offering for sale, or importing products that infringe the claims of the '210 patent; and inducing and contributing to infringement by others of the claims of the '210 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 102 of the Complaint.

103. On information and belief, Defendants use, import, offer for sale, and sell certain infringing products in the United States. The Accused Products are, for example, Wi-Fi 6 (802.11ax) enabled devices, including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables, used, offered for sale, sold, and/or imported by Defendants in the United States.



**ANSWER:** Samsung admits that it sells certain products that are compatible with Wi-Fi 6 (802.11ax) including mobile phones, tablets, laptops, e-readers, cameras, appliances, and wearables. Samsung denies any remaining allegations in Paragraph 103 of the Complaint.

104. The Accused Products satisfy all claim limitations of one or more claims of the '210 Patent. On information and belief, the Accused Products employ, implement, or utilize materially the same Wi-Fi 6 technology, such that facts material to infringement by one Accused Product will be material to all Accused Products. For example, the Accused Products include "A wireless communication terminal, the terminal":

**ANSWER:** To the extent Paragraph 104 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 104 of the Complaint.

105. The Accused Products include "a communication unit" and "a processor configured to process signals transmitted and received through the communication unit":

**ANSWER:** To the extent Paragraph 105 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 105 of the Complaint.

106. In the Accused Products, the processor is configured to "receive, through the communication unit, a high efficiency multi-user PHY protocol data unit (HE MU PPDU)."

**ANSWER:** To the extent Paragraph 106 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 106 of the Complaint.

107. In the Accused Products, "a preamble of the HE MU PPDU includes high efficiency signal A field (HE-SIG-A) and high efficiency signal B field (HE-SIG-B)."

**ANSWER:** To the extent Paragraph 107 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 107 of the Complaint.

108. In the Accused Products, the processor is configured to "decode the received HE

MU PPDU based on information obtained from the preamble.”

**ANSWER:** To the extent Paragraph 108 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 108 of the Complaint.

109. In the Accused Products, “when a SIG-B compression field of the HE-SIG-A indicates full bandwidth multi User-Multiple Input Multiple Output (MU-MIMO) transmission, a format of user field(s) included in a user specific field of the HE-SIG-B is identified based on a number of MU-MIMO users indicated by a subfield of the HE-SIG-A.”

**ANSWER:** To the extent Paragraph 109 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 109 of the Complaint.

110. In the Accused Products, “when the number of MU-MIMO users indicates two or more users, the user specific field of the HE-SIG-B includes user fields for MU-MIMO allocation.”

**ANSWER:** To the extent Paragraph 110 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 110 of the Complaint

111. In the Accused Products, “when the number of MU-MIMO users indicates a single user, the user specific field of the HE-SIG-B includes one user field for non-MU-MIMO allocation.”

**ANSWER:** To the extent Paragraph 111 recites and implicates legal conclusions, no response is required. Samsung denies all remaining allegations in Paragraph 111 of the Complaint.

112. Defendants have also knowingly and intentionally induced and contributed to infringement of the ’210 patent in violation of 35 U.S.C. §§ 271(b) and 271(c). For example, Defendants have had knowledge or were willfully blind of the ’210 patent and the infringing nature of the Accused Products at least because SEC had received the April 8, 2022, letter from Sisvel

identifying the '210 patent as “essential to the 802.11ax standard” and identifying examples of Samsung products that implement essential features of the standard.

**ANSWER:** Samsung denies the allegations in Paragraph 112 of the Complaint.

113. Despite this knowledge of the '210 patent, Defendants have continued to actively encourage and instruct its customers to use and integrate the Accused Products in ways that directly infringe the '210 patent. Defendants have done so knowing and intending that their customers would commit these infringing acts. Defendants have also continued to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '210 patent, thereby specifically intending for and inducing their customers to infringe the '210 patent through the customers' normal and customary use of the Accused Products.

**ANSWER:** Samsung denies the allegations in Paragraph 113 of the Complaint.

114. On information and belief, the Accused Products contain components that constitute a material part of the '210 patent invention and that are not a staple article or commodity suitable for substantial noninfringing use. On information and belief, Defendants have sold, offered for sale, and imported into the United States such components knowing they are especially made or especially adapted for use in infringement of the '210 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 114 of the Complaint.

115. On information and belief, Defendants' infringement has and continues to be willful. Defendants, without a good faith belief of invalidity or non-infringement, have known or have been willfully blind to the fact that making, using, offering to sell, or selling the Accused Products to their customers, infringes the '210 patent.

**ANSWER:** Samsung denies the allegations in Paragraph 115 of the Complaint.

116. Defendants have induced, and continue to induce, infringement of the '210

patent by actively encouraging others (including its customers) to use, offer to sell, sell, and import the Accused Products. On information and belief, these acts include providing information and instructions on the use of the Accused Products; providing information, education, and instructions to its customers; providing the Accused Products to customers; and indemnifying patent infringement within the United States.

**ANSWER:** Samsung denies the allegations in Paragraph 116 of the Complaint.

117. Samsung and its customers benefit from the use of the inventions claimed in the '210 patent. On information and belief, these benefits include faster throughput, higher capacity, and broader coverage when using Wi-Fi 6 communications.

**ANSWER:** Samsung denies the allegations in Paragraph 117 of the Complaint.

118. Wilus has been damaged by Defendants' willful infringement of the '210 patent and is entitled to damages as provided for in 35 U.S.C. § 284, including reasonable royalty damages.

**ANSWER:** Samsung denies the allegations in Paragraph 118 of the Complaint.

**[WILUS'S] JURY DEMAND**

119. Samsung admits that Wilus sets forth a demand for a trial by jury. Samsung likewise demands a trial by jury on all issues so triable raised by Wilus's Complaint or by Samsung's Answer, Additional Defenses, and Counterclaims.

**[WILUS'S] RELIEF REQUESTED**

120. Samsung denies the underlying allegations of Wilus's Prayer for Relief against Samsung, denies that Wilus is entitled to any relief whatsoever, and requests that the Court deny

all relief to Wilus, enter judgment in favor of Samsung, and award Samsung its attorneys' fees as the prevailing party in the action.

121. To the extent that any allegations of the Complaint have not been previously specifically admitted or denied, Samsung denies them.

\*\*\*\*

### **ADDITIONAL DEFENSES**

122. Samsung asserts the following defenses, without assuming the burden of proof on issues as to which Wilus bears such burden. Samsung reserves all defenses permitted under the Federal Rules of Civil Procedure, the patent laws of the United States, and/or at law or equity, which may now exist or in the future be available based on discovery and further investigation in this case. Assertion of a defense is not a concession that Samsung has the burden of proving the matter asserted.

#### **FIRST ADDITIONAL DEFENSE** **(Failure to State a Claim)**

123. Wilus fails to state a claim upon which relief can be granted.

#### **SECOND ADDITIONAL DEFENSE** **(Non-Infringement)**

124. Samsung does not infringe and has not infringed, under any theory of infringement, including directly (whether individually or jointly) or indirectly (whether contributorily or by inducement), any valid, enforceable claim of the Asserted Patents, either literally or under the Doctrine of Equivalents, and has not committed any acts in violation of 35 U.S.C. § 271.

**THIRD ADDITIONAL DEFENSE**  
**(Invalidity)**

125. Each asserted claim of the Asserted Patents is invalid for failure to comply with one or more of the requirements of United States Code, Title 35, including, without limitation, 35 U.S.C. §§ 101, 102, 103, 111, 112, and/or 115, and the rules, regulations, and laws pertaining thereto.

**FOURTH ADDITIONAL DEFENSE**  
**(Prosecution History Estoppel and/or Disclaimer)**

126. Wilus is estopped from construing certain of the asserted claims of the Asserted Patents to cover or include, either literally or by application of the doctrine of equivalents, methods used, or devices manufactured, used, imported, sold, or offered for sale by Samsung because of admissions, amendments, and statements to the USPTO during prosecution of the applications leading to the issuance of the Asserted Patents or related family members.

**FIFTH ADDITIONAL DEFENSE**  
**(Limitation on Damages)**

127. Wilus's claims for damages are statutorily limited or barred by 35 U.S.C. §§ 286, 288, and/or 28 U.S.C. § 1498.

**SIXTH ADDITIONAL DEFENSE**  
**(Marking)**

128. Any claim for damages by Wilus is limited by failure to mark, including without limitation, to the extent Wilus contends that any products made by it or any licensees to the Asserted Patents are covered by the Asserted Patents, to the extent that any such entity fails to mark its products with the numbers of the Asserted Patents and/or its failure to require and/or police marking.

**SEVENTH ADDITIONAL DEFENSE**  
**(Not an Exceptional Case)**

129. Wilus cannot prove that this is an exceptional case justifying an award of attorneys' fees against Samsung under 35 U.S.C. § 285, under the Court's inherent power, or otherwise.

**EIGHTH ADDITIONAL DEFENSE**  
**(No Willful Infringement)**

130. Wilus is not entitled to enhanced damages under 35 U.S.C. § 284 because Samsung has not intentionally, willfully, or deliberately infringed any claim of the asserted patents, or acted with egregious conduct.

**NINTH ADDITIONAL DEFENSE**  
**(Lack of Standing)**

131. To the extent that Wilus does not own all substantial rights in the Asserted Patents, Wilus lacks standing to pursue some or all of its claims against Samsung.

**TENTH ADDITIONAL DEFENSE**  
**(Estoppel and/or Waiver)**

132. Wilus's attempted enforcement of the Asserted Patents against Samsung is barred by estoppel and/or waiver. For example, to the extent the Asserted Patents are essential to the Wi-Fi 6 standard, Wilus is estopped from enforcing the Asserted Patents against Samsung because of Wilus's failure to comply with its FRAND (Fair, Reasonable, And Non-Discriminatory terms) obligations. As another example, to the extent the Asserted Patents are essential to one or more of the above-referenced standards, Wilus is estopped from seeking an injunction or lost profits by its FRAND obligations.

133. In addition, Wilus's attempted enforcement of the Asserted Patents against Samsung is barred by equitable estoppel and/or implied waiver because Wilus, including its IEEE representatives, failed to timely disclose to IEEE that Wilus was a holder of potential essential

patent claims. For example, upon information and belief, Wilus's IEEE representatives were personally aware of the '281 patent and '595 patent priority applications—Korean Patent Application Nos. 10-2015-0186871 (filed December 24, 2015), 10-2016-0004471 (filed January 13, 2016), 10-2016-005835 (filed January 18, 2016), 10-2016-0026683 (filed March 4, 2016), 10-2016-0030006 (filed March 13, 2016), 10-2016-0062422 (filed May 20, 2016), and 10-2016-0083756 (filed July 1, 2016)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of March 15, 2016, where Wilus's submission "HE-SIG-B Signaling Discussions" was discussed, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '281 patent and '595 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

134. Similarly, upon information and belief, Wilus's IEEE representatives were personally aware of the '077 patent priority applications—Korean Patent Application Nos. 10-2015-0092525 (filed June 29, 2015) and 10-2015-0117434 (filed August 20, 2015)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of July 12-17, 2015, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and



belief, Wilus's representatives failed to report its ownership of the '077 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

135. Furthermore, Wilus's IEEE representatives were personally aware of the '210 patent priority applications—Korean Patent Application Nos. 10-2017-0003147 (filed January 9, 2017) and 10-2017-0008927 (filed January 18, 2017)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of January 16-20, 2017, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '210 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

136. Wilus's and its representatives' decision to not disclose Wilus as a holder of potentially essential patent claims granted Wilus an unfair benefit, including, for example, causing IEEE to unwittingly adopt an industry standard allegedly incorporating the Wilus's patented technology. Moreover, Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims amounts to egregious misconduct. Thus, Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims amounts to implied waiver such that the Asserted Patents cannot be enforced against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.

137. Moreover, Wilus's and its representatives' decision to not disclose Wilus as a holder of potentially essential patent claims constitutes a misleading conduct on Wilus's part,

leading IEEE and its members, including Samsung, to reasonably infer that Wilus did not intend to enforce its patent rights against those practicing the IEEE 802.11ax or 802.11 standards. In view of IEEE's patent policy, IEEE and its members, including Samsung, reasonably relied upon Wilus's conduct and would be materially prejudiced if Wilus is permitted to proceed with its claim. Thus, in view of Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims, Wilus is equitably estopped from enforcing the Asserted Patents against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.

**ELEVENTH ADDITIONAL DEFENSE**

**(License Express or Implied and/or Patent Exhaustion)**

138. Wilus's claims are barred in whole or in part by express or implied license and/or patent exhaustion.

**TWELFTH ADDITIONAL DEFENSE**  
**(No Injunctive Relief)**

139. Wilus's claim for injunctive relief is barred because there exists an adequate remedy at law, and Wilus's claims otherwise fail to meet the requirements for such relief, including because Wilus failed to comply with its FRAND obligations.

**THIRTEENTH ADDITIONAL DEFENSE**  
**(Failure to Negotiate in Good Faith)**

140. Wilus has failed to negotiate with Samsung in good faith and failed to comply with its FRAND obligations.

**SAMSUNG'S COUNTERCLAIMS**

In accordance with Rule 13 of the Federal Rules of Civil Procedure, Samsung hereby alleges and asserts the following Counterclaims against Defendant Wilus Institute of Standards and Technology Inc. (“Wilus”).

### **THE PARTIES**

1. Samsung Electronics Co., Ltd. (“SEC”) is a corporation organized under the laws of the Republic of Korea with its principal place of business at 129 Samsung-Ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea.

2. Samsung Electronics America, Inc. (“SEA”) is a United States corporation organized under the laws of the State of New York. SEA has its principal place of business is at 85 Challenger Road, Ridgefield Park, New Jersey 07660.

3. Upon information and belief and based on Paragraph 7 of the Complaint as pled by Wilus, Wilus is a corporation organized under the laws of South Korea, with its principal place of business at 5F 216 Hwangsaoul-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, 13595 Republic of Korea.

### **JURISDICTION AND VENUE**

4. Samsung incorporates by reference the preceding paragraphs as if fully stated herein.

5. Samsung’s Counterclaims arise under the patent laws of the United States, 35 U.S.C. § 1 et seq., and the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 et seq. This Court has subject matter jurisdiction over Samsung’s Counterclaims under 28 U.S.C. §§ 1331, 1338, 2201, and 2202. An actual controversy exists under the Declaratory Judgment Act, at least because Wilus has asserted and is asserting infringement of United States Patent Nos. 10,313,077 (“’077

patent”), 10,687,281 (“‘281 patent”), 11,470,595 (“‘595 patent”), and 11,159,210 (“‘210 patent”) (collectively, “Asserted Patents”) by Samsung and Samsung denies those allegations.

6. The Court has personal jurisdiction over Wilus at least by virtue of Wilus’s consent to the personal jurisdiction of this Court by filing the Complaint against Samsung in this Court. For the purposes of the Counterclaims set forth herein, and without waiving any defense of lack of venue or improper venue in connection with Wilus’s Complaint and causes of action, venue is proper in this District at least because Wilus has submitted to personal jurisdiction in this Court and has consented to this venue by filing its Complaint here.

7. Venue is proper in this District as to Wilus based at least on Wilus’s filing of this action, pursuant to at least §§ 1391 and 1400.

### **BACKGROUND**

8. The Institute of Electrical and Electronics Engineers (“IEEE”) is a technical professional organization. The IEEE Standards Association (“IEEE-SA”) is an organization that facilitates standards development and standards related collaboration. This standards-based work includes the IEEE 802 LAN/MAN group of standards used for computer networking, including the 802.11 set of standards that govern Wi-Fi networks and wireless local area networks.

9. The IEEE allows individuals and organizations to submit a “Letter of Assurance” that states the submitter’s position regarding ownership, enforcement, or licensing of its patents it alleges are essential to practicing the standard. In the Letter of Assurance, a submitter can declare that it will “grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis with reasonable terms and conditions that are demonstrably free of unfair discrimination.” Such a declaration gives rise to an obligation to license the alleged essential patents under fair, reasonable, and nondiscriminatory terms and conditions.

10. Moreover, on information and belief, at the time of Wilus's participation in the IEEE 802.11 TGax, the IEEE Standards Association's ("IEEE-SA") Patent Policy stated that "individuals participating in the standards development process: (a) *shall* inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an Accepted Letter of Assurance, that are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents; and (b) should inform the IEEE (or cause the IEEE to be informed) of any other holders of potential Essential Patent Claims that are not already the subject of an Accepted Letter of Assurance." On information and belief, the IEEE-SA Patent Policy further stated that "[i]f the patent holder or patent applicant provides an LOA, it should do so as soon as reasonably feasible in the standards development process once the PAR is approved by the IEEE SA Standards Board."

11. This lawsuit involves patents that Wilus has asserted are essential to practicing the IEEE's 802.11ax standard (the "Wi-Fi 6 standard").

12. In its Complaint, Wilus alleges that Samsung has infringed and continues to infringe the Asserted Patents and that the Asserted Patents are essential to the Wi-Fi 6 standard.

13. Wilus alleges that it owns the Asserted Patents. Wilus has granted its licensing agent Sisvel International S.A. ("Sisvel") at least a license to grant rights to patents alleged to be essential to the Wi-Fi 6 standard including Wilus's Wi-Fi 6 alleged standard essential patents.

14. Sisvel operates a Wi-Fi 6 "patent pool"—a collection of patents for which Sisvel holds itself out as licensing agent. Sisvel alleges the patents are essential to the Wi-Fi 6 standard. Sisvel asserts that it has the right to grant licenses to all Wi-Fi 6 standard essential patents owned and/or controlled by the patent owners that are part of its Wi-Fi 6 patent pool.

15. Sisvel sent a letter to Samsung on April 8, 2022, offering a license to the Wi-Fi 6 SEPs in its pool. The April 8 letter referenced only patents “co-owned by Wilus Inc. and SK Telecom Co., Ltd.” Sisvel sent another letter on January 18, 2023. The second letter referenced Huawei, MediaTek, Panasonic, Philips, SK Telecom, and Wilus, and again offered to provide Samsung with a license to the Wi-Fi 6 patent pool “under fair, reasonable, and non-discriminatory (‘FRAND’) terms.”

16. Samsung and Sisvel corresponded over 3 years and 4 months. During the correspondence, Samsung attempted to understand Sisvel’s licensing model, including how the rates were determined, what patents were covered, and what the implications may be if Samsung were to receive a license directly from one of the pool members. However, Wilus never independently corresponded with Samsung, and for unknown reasons and without warning, on September 11, 2024, Wilus, a member of Sisvel’s Wi-Fi 6 patent pool, filed this suit against Samsung, alleging infringement of several of the patents Sisvel had previously offered to license to Samsung.

17. The Asserted Patents and other patents that Sisvel and Wilus have claimed are essential to the Wi-Fi 6 standard, including all Wi-Fi 6 patents that are part of the Sisvel Wi-Fi 6 patent pool (the “Alleged Wi-Fi 6 SEPs”), and that Sisvel has demanded Samsung license, are encumbered by express and voluntary written covenants, declarations, and/or promises made by Wilus and other members of the Sisvel Wi-Fi 6 patent pool to the IEEE, pursuant to the IEEE-SA Standards Board Bylaws, to license alleged SEPS to any third-party beneficiary and/or user of the standard on fair, reasonable, and non-discriminatory terms.

### **Wilus’s Duty to Disclose Potentially Essential Patent Claims**

18. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

19. On information and belief, Wilus and its representatives agreed to be bound by the IEEE-SA Patent Policy at least by participating in the IEEE 802.11 TGax.

20. On information and belief, at the time of Wilus's participation in the IEEE 802.11 TGax, the IEEE-SA Patent Policy stated that participants "shall inform the IEEE (or cause the IEEE to be informed) of the holder of any potential Essential Patent Claims of which they are personally aware and that are not already the subject of an Accepted Letter of Assurance, that are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents." Thus, Wilus and its representatives owed IEEE an ongoing contractual duty to disclose any potential essential patent claims of which they had knowledge during the IEEE 802.11 TGax proceedings.

21. On information and belief, Wilus and its representatives were reminded of their continuing obligations under the IEEE-SA Patent Policy throughout the course of the IEEE 802.11 TGax proceedings. For example, the meeting minutes and agenda from a March 16, 2016 working group meeting and a November 7, 2016 working group meeting indicate that meeting chair reviewed IEEE's policy regarding participants' duty to inform the IEEE of potentially essential patents.

#### **Wilus's FRAND Commitment**

22. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

23. On January 15, 2021, pursuant to the IEEE-SA Standards Board Bylaws, Rule 6, Wilus submitted a Letter of Licensing Assurance for Essential Patent Claims with the IEEE.

Wilus's letter stated that it "may own, control, or have the ability to license Patent Claims that might be or become Essential Patent Claims." In the letter, Wilus committed to "grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis *with reasonable terms and conditions* that are demonstrably *free of unfair discrimination*." Wilus's letter identified "802.11ax" as the IEEE Standard to which its commitment applied.

24. On December 27, 2022, Wilus submitted a second Letter of Licensing Assurance for Essential Patent Claims with the IEEE. Wilus's letter again stated that it "may own, control, or have the ability to license Patent Claims that might be or become Essential Patent Claims." Wilus's second letter made the same commitment to "grant a license under reasonable rates to an unrestricted number of applicants on a worldwide basis *with reasonable terms and conditions* that are demonstrably *free of unfair discrimination*." Wilus's second letter identified "802.11" in general as the IEEE Standard to which its commitment applied.

25. On information and belief, Wilus's letters are "Accepted Letters of Assurance" under the IEEE-SA Standards Board Bylaws at least because they have been posted to the IEEE SA website.

26. On information and belief, Wilus participated in the standard-setting process through membership in relevant Standard-Setting Organizations ("SSOs"), including the IEEE.

27. The IEEE relied on Wilus's FRAND commitments and its commitment to disclose essential patent claims during the standard development process when it allegedly incorporated Wilus's proprietary technology into the Wi-Fi 6 standard.

**FIRST COUNT**  
**(Breach of Contract re IEEE Policy against Wilus)**

28. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.



29. As explained above, Sisvel has alleged that the patents asserted in this action are essential to the Wi-Fi 6 standard, and Wilus has cited these allegations in its Complaint. *E.g.*, Dkt. No. 1 ¶ 4.

30. As set forth above, for consideration, including IEEE membership and participation, Wilus entered into express and/or implied contracts with the IEEE's members, or alternatively, with the IEEE to which IEEE members and others are intended third-party beneficiaries, in which Wilus agreed, among other things, to abide by the IEEE's policies and rules.

31. Wilus made this commitment by submitting Letters of Assurance to the IEEE pursuant to Rule 6 of the IEEE-SA Standards Board Bylaws.

32. Each person (including a company) who distributes products compliant with the Wi-Fi standards promulgated by the relevant SSOs is an intended third-party beneficiary of the contractual FRAND commitments encumbering Wilus's alleged SEPs, including Samsung.

33. As a third-party beneficiary, Samsung relied on Wilus's FRAND licensing promises when it incorporated compliance with wireless local area network connectivity into its products.

34. Wilus had a contractual obligation to offer to license the Alleged Wi-Fi 6 SEPs on FRAND terms.

35. Yet Wilus has breached its obligations to the IEEE, to Samsung, and to companies like Samsung by refusing to offer Samsung a license to the Alleged Wi-Fi 6 SEPs on FRAND terms and conditions, failing to negotiate and act in good faith, and by using injunctive relief to obtain leverage in licensing discussions for SEPs.

36. In addition, Wilus as well as its representatives committed to abide by the IEEE's policies and rules by participating in 802.11 standard development process. Thus, on information and belief, Wilus and its representatives had a contractual obligation to timely disclose that Wilus was the owner of potential essential patent claims. Yet Wilus and its representatives have breached their obligation to the IEEE, to Samsung, and to companies like Samsung by failing to timely disclose that Wilus was the owner of potentially essential patent claims.

37. For example, upon information and belief, Wilus's IEEE representatives were personally aware of the '281 patent and '595 patent priority applications—Korean Patent Application Nos. 10-2015-0186871 (filed December 24, 2015), 10-2016-0004471 (filed January 13, 2016), 10-2016-005835 (filed January 18, 2016), 10-2016-0026683 (filed March 4, 2016), 10-2016-0030006 (filed March 13, 2016), 10-20160062422 (filed May 20, 2016), and 10-2016-0083756 (filed July 1, 2016)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of March 15, 2016, where Wilus's submission "HE-SIG-B Signaling Discussions" was discussed, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '281 patent and '595 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

38. Similarly, upon information and belief, Wilus's IEEE representatives were personally aware of the '077 patent priority applications—Korean Patent Application Nos. 10-2015-0092525 (filed June 29, 2015) and 10-2015-0117434 (filed August 20, 2015)—at the time

the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of July 12-17, 2015, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '077 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

39. Furthermore, Wilus's IEEE representatives were personally aware of the '210 patent priority applications—Korean Patent Application Nos. 10-2017-0003147 (filed January 9, 2017) and 10-2017-0008927 (filed January 18, 2017)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of January 16-20, 2017, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '210 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

40. As a result of Wilus's breach of contract, Samsung has been injured in its business or property, and is threatened by imminent loss of profits, customers, potential customers, goodwill, and product image.

41. Samsung has suffered and will continue to suffer irreparable injury caused by Wilus's conduct alleged above, unless and until the Court enjoins such acts, practices, and conduct.

**SECOND COUNT**  
**(Breach of Duty of Good Faith against Wilus)**

42. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

43. As explained above, Sisvel has alleged that the patents asserted in this action are essential to the Wi-Fi 6 standard, and Wilus has cited these allegations in its Complaint. *E.g.*, Dkt. No. 1 ¶ 4.

44. As set forth above, for consideration, including IEEE membership and participation, Wilus entered into express and/or implied contracts with the IEEE's members, or alternatively, with the IEEE to which IEEE members and others are intended third-party beneficiaries, in which Wilus agreed, among other things, to abide by the IEEE's policies and rules.

45. Wilus made this commitment by submitting Letters of Assurance to the IEEE pursuant to Rule 6 of the IEEE-SA Standards Board Bylaws.

46. Each person (including a company) who distributes products compliant with the Wi-Fi standards promulgated by the relevant SSOs is an intended third-party beneficiary of the contractual FRAND commitments encumbering Wilus's alleged SEPs, including Samsung .

47. As a third-party beneficiary, Samsung relied on Wilus's FRAND licensing promises when it incorporated compliance with wireless local area network connectivity into its products.

48. Wilus has breached its obligation to negotiate in good faith, as set forth above. Wilus has not offered to license its allegedly essential Wi-Fi 6 SEPs on FRAND terms. To the

extent that Sisvel's April 8, 2022 and January 18, 2023 communication of its public rates can be considered an offer, it was not made in good faith. Wilus has further breached its good faith obligation by refusing to negotiate in good faith and using injunctive relief to improperly obtain leverage, including by seeking injunctive relief based on purportedly standard essential patents to obtain leverage in licensing discussions.

49. In addition, Wilus as well as its representatives made the commitment to abide by the IEEE's policies and rules by participating in 802.11 standard development process. Thus, Wilus and its representatives had a contractual obligation to timely disclose that Wilus was the owner of potential essential patent claims.

50. Yet Wilus and its representatives have breached their obligation to the IEEE, to Samsung, and to companies like Samsung by failing to timely disclose that Wilus was the owner of potentially essential patent claims.

51. For example, upon information and belief, Wilus's IEEE representatives were personally aware of the '281 patent and '595 patent priority applications—Korean Patent Application Nos. 10-2015-0186871 (filed December 24, 2015), 10-2016-0004471 (filed January 13, 2016), 10-2016-005835 (filed January 18, 2016), 10-2016-0026683 (filed March 4, 2016), 10-2016-0030006 (filed March 13, 2016), 10-20160062422 (filed May 20, 2016), and 10-2016-0083756 (filed July 1, 2016)—at the time the accused features were being considered by the IEEE 802.11Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of March 15, 2016, where Wilus's submission "HE-SIG-B Signaling Discussions" was discussed, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted

Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '281 patent and '595 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

52. Similarly, upon information and belief, Wilus's IEEE representatives were personally aware of the '077 patent priority applications—Korean Patent Application Nos. 10-2015-0092525 (filed June 29, 2015) and 10-2015-0117434 (filed August 20, 2015)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of July 12-17, 2015, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '077 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

53. Furthermore, Wilus's IEEE representatives were personally aware of the '210 patent priority applications—Korean Patent Application Nos. 10-2017-0003147 (filed January 9, 2017) and 10-2017-0008927 (filed January 18, 2017)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of January 16-20, 2017, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to

report its ownership of the '210 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

54. As a result of Wilus's breach, Samsung has been injured in its business or property, and is threatened by imminent loss of profits, customers, potential customers, goodwill, and product image. Samsung has also been forced to defend groundless litigation and has incurred substantial expense in doing so.

55. Samsung has suffered and will continue to suffer irreparable injury caused by Wilus's conduct alleged above, unless and until the Court enjoins such acts, practices, and conduct.

**THIRD COUNT**  
**(Declaratory Judgment of Non-Infringement of the '077 Patent)**

56. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

57. Based on Wilus's filing of this action and at least Samsung's First Additional Defense, an actual controversy has arisen and now exists between the parties as to whether Samsung infringes U.S. Patent No. 10,313,077 (the "'077 Patent").

58. Wilus's Complaint alleges that Samsung infringes claims of the '077 patent even though Samsung has not infringed, contributed to the infringement, or induced the infringement of claim 1 or any other claim of the '077 patent. Samsung denies these claims of infringement and believes that the Complaint has been filed without good cause for believing the allegations to be true. In particular, Wilus's Complaint fails to articulate a sufficient basis for alleging that Samsung infringes, at least because Wilus fails to point to anything within the accused products that infringes, instead relying solely on IEEE specifications without any substantiation that the accused products practice the specific sections of the standard on which Wilus relies on for infringement.

59. An actual, continuing and justiciable controversy exists between Samsung and Wilus as to Samsung's non-infringement of all claims of the '077 patent as evidenced by Wilus's Complaint. Absent a declaration of non-infringement, Wilus will continue to wrongfully assert the '077 patent against Samsung, and will continue to cause Samsung injury and damage.

60. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Samsung requests a judicial determination and declaration that Samsung does not infringe and has not infringed, either directly or indirectly, any claim of the '077 Patent.

**FOURTH COUNT**  
**(Declaratory Judgment of Non-Infringement of the '281 Patent)**

61. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

62. Based on Wilus's filing of this action and at least Samsung's First Additional Defense, an actual controversy has arisen and now exists between the parties as to whether Samsung infringes U.S. Patent No. 10,687,281 (the "'281 Patent").

63. Wilus's Complaint alleges that Samsung infringes claims of the '281 patent even though Samsung has not infringed, contributed to the infringement, or induced the infringement of claim 1 or any other claim of the '281 patent. Samsung denies these claims of infringement and believes that the Complaint has been filed without good cause for believing the allegations to be true. In particular, Wilus's Complaint fails to articulate a sufficient basis for alleging that Samsung infringes, at least because Wilus fails to point to anything within the accused products that infringes, instead relying solely on IEEE specifications without any substantiation that the accused products practice the specific sections of the standard on which Wilus relies on for infringement.

64. An actual, continuing and justiciable controversy exists between Samsung and Wilus as to Samsung's non-infringement of all claims of the '281 patent as evidenced by Wilus's



Complaint. Absent a declaration of non-infringement, Wilus will continue to wrongfully assert the '281 patent against Samsung, and will continue to cause Samsung injury and damage.

65. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Samsung requests a judicial determination and declaration that Samsung does not infringe and has not infringed, either directly or indirectly, any claim of the '281 Patent.

**FIFTH COUNT**  
**(Declaratory Judgment of Non-Infringement of the '595 Patent)**

66. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

67. Based on Wilus's filing of this action and at least Samsung's First Additional Defense, an actual controversy has arisen and now exists between the parties as to whether Samsung infringes U.S. Patent No. 11,470,595 (the "'595 Patent").

68. Wilus's Complaint alleges that Samsung infringes claims of the '595 patent even though Samsung has not infringed, contributed to the infringement, or induced the infringement of claim 1 or any other claim of the '595 patent. Samsung denies these claims of infringement and believes that the Complaint has been filed without good cause for believing the allegations to be true. In particular, Wilus's Complaint fails to articulate a sufficient basis for alleging that Samsung infringes, at least because Wilus fails to point to anything within the accused products that infringes, instead relying solely on IEEE specifications without any substantiation that the accused products practice the specific sections of the standard on which Wilus relies on for infringement.

69. An actual, continuing and justiciable controversy exists between Samsung and Wilus as to Samsung's non-infringement of all claims of the '595 patent as evidenced by Wilus's Complaint. Absent a declaration of non-infringement, Wilus will continue to wrongfully assert the '595 patent against Samsung, and will continue to cause Samsung injury and damage.

70. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Samsung requests a judicial determination and declaration that Samsung does not infringe and has not infringed, either directly or indirectly, any claim of the '595 Patent.

**SIXTH COUNT**  
**(Declaratory Judgment of Non-Infringement of the '210 Patent)**

71. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

72. Based on Wilus's filing of this action and at least Samsung's First Additional Defense, an actual controversy has arisen and now exists between the parties as to whether Samsung infringes U.S. Patent No. 11,159,210 (the "'210 Patent").

73. Wilus's Complaint alleges that Samsung infringes claims of the '210 patent even though Samsung has not infringed, contributed to the infringement, or induced the infringement of claim 1 or any other claim of the '210 patent. Samsung denies these claims of infringement and believes that the Complaint has been filed without good cause for believing the allegations to be true. In particular, Wilus's Complaint fails to articulate a sufficient basis for alleging that Samsung infringes, at least because Wilus fails to point to anything within the accused products that infringes, instead relying solely on IEEE specifications without any substantiation that the accused products practice the specific sections of the standard on which Wilus relies on for infringement.

74. An actual, continuing and justiciable controversy exists between Samsung and Wilus as to Samsung's non-infringement of all claims of the '210 patent as evidenced by Wilus's Complaint. Absent a declaration of non-infringement, Wilus will continue to wrongfully assert the '210 patent against Samsung, and will continue to cause Samsung injury and damage.

75. Pursuant to the Federal Declaratory Judgment Act, 28 U.S.C. § 2201 *et seq.*, Samsung requests a judicial determination and declaration that Samsung does not infringe and has not infringed, either directly or indirectly, any claim of the '210 Patent.

**SEVENTH COUNT**  
**(Declaratory Judgment of Invalidity of the '077 Patent)**

76. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

77. Based on Wilus's filing of this action and at least Samsung's Second Additional Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the '077 Patent. Absent a declaration of invalidity, Wilus will continue to wrongfully assert the '077 Patent against Samsung, and thereby cause Samsung irreparable injury and damage.

78. Each and every claim of the '077 Patent is invalid under the provisions of Title 35, United States Code, including, but not limited to Sections 101, 102, 103, 111, 112, and/or 115, and Samsung is entitled to a declaration to that effect.

79. By way of example and without limitation, claims of the '077 patent are invalid based on, for instance, one or more of U.S. Patent Application Publication No. 2016/0345202 to Bharadwaj (see also its priority applications), U.S. Patent No. 10,142,067 to Cao (*see also* its priority applications), a skilled artisan's knowledge, draft versions of the IEEE 802.11ax standard, contributions to the IEEE 802.11ax standard, and versions of IEEE 802.11 including IEEE 802.11ac and IEEE 802.11-2012 (claim [1pre] – *see, e.g.*, Bharadwaj at ¶¶ [0033], [0042], [0048]-[0086], and Figs. 1, 3A, 8; Cao at 3:23-45, 5:41-67, 4:17-5:40, and Fig. 1; claim [1a] – *see, e.g.*, Bharadwaj at ¶¶ [0033], [0042], [0048]-[0086], and Figs. 1, 3A, 8; Cao at 3:23-45, 5:41-67, 4:17-5:40, and Fig. 1; claim [1b] – *see, e.g.*, Bharadwaj at ¶¶ [0033], [0042], [0048]-[0086], and Figs. 1, 3A, 8; Cao at 3:23-45, 5:41-67, 4:17-5:40, and Fig. 1; claim [1c] – *see, e.g.*, Bharadwaj at ¶¶

[0042]-[0043], [0046], and Figs. 3A, 4A; Cao at 3:23-45, 5:41-67, 6:51-59, Fig. 2; claim [1d] – *see, e.g.*, Bharadwaj at ¶¶ [0042]-[0043], [0046], and Figs. 3A, 4A; Cao at 3:23-45, 5:41-67, 6:51-59, Fig. 2; claim [1e] – *see, e.g.*, Bharadwaj at ¶¶ [0050]; Cao at 7:31-47, Fig. 2, Fig. 3; claim [1f] – *see, e.g.*, Bharadwaj at ¶¶ [0050]; Cao at 15:53-16:18, 7:31-47, 12:43-65; claim [1g] – *see, e.g.*, Bharadwaj at ¶¶ [0032], [0048], [0049]-[0059], [0063], [0088], Figs. 4A, 4B; Cao at 16:19-29; 10:29-46; claim [1h] – *see, e.g.*, Bharadwaj at ¶¶ [0032], [0048], [0049]-[0059], [0063], [0088], Figs. 4A, 4B; Cao at 16:19-29; 10:29-46).

80. Moreover, claims 1 and 8 recite “a symbol of the legacy physical layer frame” three times: “obtain information other than information on the duration of the non-legacy physical layer frame through a remaining value obtained by dividing the length information by a data size transmittable by a symbol of a legacy physical layer frame,” “wherein the data size transmittable by a symbol of the legacy physical layer frame is 3 octets when a data rate of the legacy physical layer frame is 6 Mbps,” “m denotes a value obtained by subtracting the remaining value from the data size transmittable by a symbol of the legacy physical layer frame,” and “bPE\_Disambiguity denotes a value of PE Disambiguity field” / “wherein the PE Disambiguity field is set based on the duration of a symbol of the data of the non-legacy physical layer frame and an increment of duration to set a value of the length information based on a duration of a symbol of the legacy physical layer frame.”

81. These requirements are invalid under Section 112 because it is not reasonably certain what these phrases mean, nor does the specification adequately describe or enable these steps as a whole. By way of example and without limitation, it is not reasonably certain whether claims 1 and 8 require three different symbols.

82. This is an exceptional case entitling Samsung to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

**EIGHTH COUNT**  
**(Declaratory Judgment of Invalidity of the '281 Patent)**

83. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

84. Based on Wilus's filing of this action and at least Samsung's Second Additional Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the '281 Patent. Absent a declaration of invalidity, Wilus will continue to wrongfully assert the '281 Patent against Samsung, and thereby cause Samsung irreparable injury and damage.

85. Each and every claim of the '281 Patent is invalid under the provisions of Title 35, United States Code, including, but not limited to Sections 101, 102, 103, 111, 112, and/or 115, and Samsung is entitled to a declaration to that effect.

86. By way of example and without limitation, claims of the '281 patent are invalid based on, for instance, one or more of U.S. Patent Application Publication No. 2017/0181129A1, claiming priority to Provisional Application No. 62/270562 (claim 1[pre] – *see, e.g.*, ¶¶ [0001], [0007], [0042]; claim 1[a] – *see, e.g.*, ¶¶ [0001], [0051]; claim 1[b] – *see, e.g.*, ¶¶ [0001], [0051]; claim 1[c] – *see, e.g.*, ¶¶ [0001], [0051]; claim 1[d] – *see, e.g.*, ¶¶ [0012], [0062]; claim 1[e] – *see, e.g.*, ¶¶ [0012], [0081]; claim 1[f] – *see, e.g.*, ¶¶ [0053], [0054], [0072]; claim 1[g] – *see, e.g.*, ¶¶ [0013], [0040], [0054], [0072], [0078], [0080], [0081]; claim 1[h] – *see, e.g.*, ¶¶ [0077], [0078], [0080]), as well as the prior art references listed on the face of the patent.

87. This is an exceptional case entitling Samsung to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

**NINETH COUNT**

**(Declaratory Judgment of Invalidity of the '595 Patent)**

88. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

89. Based on Wilus's filing of this action and at least Samsung's Second Additional Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the '595 Patent. Absent a declaration of invalidity, Wilus will continue to wrongfully assert the '595 Patent against Samsung, and thereby cause Samsung irreparable injury and damage.

90. Each and every claim of the '595 Patent is invalid under the provisions of Title 35, United States Code, including, but not limited to Sections 101, 102, 103, 111, 112, and/or 115, and Samsung is entitled to a declaration to that effect.

91. By way of example and without limitation, claims of the '595 patent are invalid based on, for instance, one or more of U.S. Patent Application Publication No. 2017/0181129A1, claiming priority to Provisional Application No. 62/270562 (claim 1[pre] – *see, e.g.*, ¶¶ [0001], [0007], [0042]; claim 1[a] – *see, e.g.*, ¶¶ [0001], [0051]; claim 1[b] – *see, e.g.*, ¶¶ [0001], [0051]; claim 1[c] – *see, e.g.*, ¶¶ [0051], [0062]; claim 1[d] – *see, e.g.*, ¶¶ [0051], [0071], [0081]; claim 1[e] – *see, e.g.*, ¶¶ [0051], [0053], [0054], [0061], [0062]; claim 1[f] – *see, e.g.*, ¶¶ [0053], [0054], [0072]; claim 1[g] – *see, e.g.*, ¶¶ [0040], [0053], [0054], [0072], [0078], [0080], [0081]; claim 1[h] – *see, e.g.*, ¶¶ [0078], [0080], [0081]) and U.S. Patent Application Publication No. 2017/0094664A1, claiming priority to Provisional Application No. 62/252886 (claim 1[pre] – *see, e.g.*, page 1; claim 1[a] – *see, e.g.*, pages 1, 8; claim 1[b] – *see, e.g.*, pages 1, 8; claim 1[d] – *see, e.g.*, pages 8, 12, 17; claim 1[f] – *see, e.g.*, pages 8, 12; claim 1[g] – *see, e.g.*, pages 8, 12, 17; claim 1[h] – *see, e.g.*, pages 12, 17, 18, 30), as well as the prior art references listed on the face of the patent.

92. This is an exceptional case entitling Samsung to an award of its attorneys' fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

**TENTH COUNT**  
**(Declaratory Judgment of Invalidity of the '210 Patent)**

93. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

94. Based on Wilus's filing of this action and at least Samsung's Second Additional Defense, an actual controversy has arisen and now exists between the parties as to the validity of the claims of the '210 Patent. Absent a declaration of invalidity, Wilus will continue to wrongfully assert the '210 Patent against Samsung, and thereby cause Samsung irreparable injury and damage.

95. Each and every claim of the '210 Patent is invalid under the provisions of Title 35, United States Code, including, but not limited to Sections 101, 102, 103, 111, 112, and/or 115, and Samsung is entitled to a declaration to that effect.

96. By way of example and without limitation, claims of the '210 patent are invalid based on, for instance, one or more of U.S. Patent No. 9,614,938 to Seok, U.S. Patent No. 8,811,507 to Baik, U.S. Patent Application Publication No. 2014/0078966 to Erceg, U.S. Patent No. 9,246,738 to Zhang (see also their priority applications), a skilled artisan's knowledge, draft versions of the IEEE 802.11ax standard including IEEE 802.11ax/D0.5 "High Efficiency (HE) PHY specification" (September 2016), contributions to the IEEE 802.11ax standard, and versions of IEEE 802.11 including IEEE 802.11ac and IEEE 802.11-2012.

97. Moreover, claims 1 and 6 require: "wherein when a SIG-B compression field of the HE-SIG-A indicates full bandwidth multi User-Multiple Input Multiple Output (MU-MIMO) transmission, a format of user field(s) included in a user specific field of the HE-SIG-B is identified based on a number of MU-MIMO users indicated by a subfield of the HE-SIG-A," and "wherein

when the number of MU-MIMO users indicates two or more users, the user specific field of the HE-SIG-B includes user fields for MU-MIMO allocation, and wherein when the number of MU-MIMO users indicates a single user, the user specific field of the HE-SIG-B includes one user field for non-MU-MIMO allocation.”

98. These requirements are invalid under Section 112 because it is not reasonably certain what these phrases mean, nor does the specification adequately describe or enable these steps as a whole. By way of example and without limitation, it is not reasonably certain how the above-identified wherein clauses further limit the claims. It is also not reasonably certain as to whether the claims require a reception of a particular HE MU PPDU. It is also not reasonably certain how there could be a “non-MU-MIMO allocation” “when a SIG-B compression field of the HE-SIG-A indicates full bandwidth multi User-Multiple Input Multiple Output (MU-MIMO) transmission.”

99. This is an exceptional case entitling Samsung to an award of its attorneys’ fees incurred in connection with this action pursuant to 35 U.S.C. § 285.

**ELEVENTH COUNT**  
**(Declaratory Judgment of Estoppel and/or Waiver)**

100. Samsung incorporates by reference its responses in the preceding paragraphs as if fully stated herein.

101. Based on Wilus’s filing of this action and at least Samsung’s Tenth Additional Defense, an actual controversy has arisen and now exists between the parties as whether Wilus’s infringement claims are barred by estoppel and/or waiver. Absent a declaration of unenforceability, Wilus will continue to wrongfully assert the Asserted Patents against Samsung, and thereby cause Samsung irreparable injury and damage.



102. Wilus's attempted enforcement of the Asserted Patents against Samsung is barred by estoppel and/or waiver, and Samsung is entitled to a declaration to that effect. For example, to the extent the Asserted Patents are essential to the Wi-Fi 6 standard, Wilus is estopped from enforcing the Asserted Patents against Samsung because of Wilus's failure to comply with its FRAND (Fair, Reasonable, And Non-Discriminatory terms) obligations. As another example, to the extent the Asserted Patents are essential to one or more of the above-referenced standards, Wilus is estopped from seeking an injunction or lost profits by its FRAND obligations.

103. In addition, Wilus's attempted enforcement of the Asserted Patents against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards is barred by equitable estoppel and/or implied waiver because Wilus, including its IEEE representatives, failed to timely disclose to IEEE that Wilus was a holder of potential essential patent claims. For example, upon information and belief, Wilus's IEEE representatives were personally aware of the '281 patent and '595 patent priority applications—Korean Patent Application Nos. 10-2015-0186871 (filed December 24, 2015), 10-2016-0004471 (filed January 13, 2016), 10-2016-005835 (filed January 18, 2016), 10-2016-0026683 (filed March 4, 2016), 10-2016-0030006 (filed March 13, 2016), 10-20160062422 (filed May 20, 2016), and 10-2016-0083756 (filed July 1, 2016)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of March 15, 2016, where Wilus's submission "HE-SIG-B Signaling Discussions" was discussed, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '281 patent

and '595 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

104. Similarly, upon information and belief, Wilus's IEEE representatives were personally aware of the '077 patent priority applications—Korean Patent Application Nos. 10-2015-0092525 (filed June 29, 2015) and 10-2015-0117434 (filed August 20, 2015)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of July 12-17, 2015, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to report its ownership of the '077 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

105. Furthermore, Wilus's IEEE representatives were personally aware of the '210 patent priority applications—Korean Patent Application Nos. 10-2017-0003147 (filed January 9, 2017) and 10-2017-0008927 (filed January 18, 2017)—at the time the accused features were being considered by the IEEE 802.11 Task Group TGax. Indeed, Wilus's IEEE representatives are listed as inventors on these patent applications. Despite this knowledge, on information and belief, during the working group meeting of January 16-20, 2017, where one or more of Wilus's IEEE representatives were present, the chair of the working group meeting reminded participants of their duty to disclose the holder of any potentially essential patent claims that were not already subject of an Accepted Letter of Assurance. On information and belief, Wilus's representatives failed to

report its ownership of the '210 patent priority applications. Wilus filed its first Letter of Assurance nearly five years later in January of 2021.

106. Wilus's and its representatives' decision to not disclose Wilus as a holder of potentially essential patent claims granted Wilus an unfair benefit, including, for example, causing IEEE to unwittingly adopt an industry standard allegedly incorporating the Wilus's patented technology. Moreover, Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims amounts to egregious misconduct. Thus, Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims amounts to implied waiver such that the Asserted Patents cannot be enforced against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.

107. Moreover, Wilus's and its representatives' decision to not disclose Wilus as a holder of potentially essential patent claims constitutes a misleading conduct on Wilus's part, leading IEEE and its members, including Samsung, to reasonably infer that Wilus did not intent to enforce its patent rights against those practicing the IEEE 802.11ax standard. In view of IEEE's patent policy, IEEE and its members, including Samsung, reasonably relied upon Wilus's conduct and would be materially prejudiced if Wilus is permitted to proceed with its claim. Thus, in view of Wilus's and its representatives' failure to disclose Wilus as a holder of potentially essential patent claims, Wilus is equitably estopped from enforcing the Asserted Patents against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.

**PRAYER FOR RELIEF**

WHEREFORE, Samsung respectfully prays that this Court enter judgment in Samsung's favor against Wilus requests the following relief:

- (i). A complete denial of Wilus's requests for damages, costs, expenses, and any other form of relief;
- (ii). Dismissal with prejudice of all claims in Wilus's Complaint against Samsung;
- (iii). A permanent injunction restraining Wilus and its respective officers, partners, employees, agents, parents, subsidiaries, and affiliates, and any other persons acting on its behalf or in concert with it, from charging, suing or threatening, orally or in writing, that the Asserted Patents have been infringed by Samsung under any subsection of 35 U.S.C. §§ 271 or 281;
- (iv). A declaration that this is an exceptional case under 35 U.S.C. § 285 and awarding to Samsung its reasonable costs and expenses of litigation, including but not limited to attorneys' fees and expert witness fees;
- (v). An award to Samsung of its costs and disbursements in defending in this action brought by Wilus;
- (vi). Adjudge and decree that Wilus is liable for breach of contract;
- (vii). Adjudge and decree that Wilus has breached their duty of good faith;
- (viii). Determine that Samsung has not infringed any asserted claim of any Asserted Patents;
- (ix). Determine that the asserted claims of the Asserted Patents are invalid and/or unenforceable;
- (x). Award Samsung damages for Wilus's breach of contract and breach of duty of good faith;
- (xi). Enjoin Wilus from conduct inconsistent with their FRAND obligations; and

- (xii). An award to Samsung of any and all further relief, in law or in equity, as this Court may deem just and proper.
- (xiii). Adjudge and decree that Wilus is equitably estopped from asserting the Asserted Patents against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.
- (xiv). Adjudge and decree that Wilus has impliedly waived its right to enforce the Asserted Patents against Samsung's products that are compliant with IEEE 802.11ax or 802.11 standards.

**RESERVATION OF ADDITIONAL DEFENSES**

Samsung reserves the right to assert additional defenses that may surface through discovery in this action.

**JURY DEMAND**

Samsung requests a trial by jury on all issues so triable.

Date: January 16, 2025

Respectfully submitted,

/s/ Melissa R. Smith

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**CERTIFICATE OF SERVICE**

I hereby certify that a true and correct copy of the foregoing document was filed electronically in compliance with Local Rule CV-5 on January 16, 2025. As of this date, all counsel of record have consented to electronic service and are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5(a)(3)(A).

/s/ Melissa R Smith

Melissa R. Smith